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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,199	09/10/2003	Yoshikazu Kobayashi	071671-0169	3230

22428 7590 11/20/2006

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EXAMINER

LAM, DUNG LE

ART UNIT	PAPER NUMBER
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2617

DATE MAILED: 11/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Information Disclosure Statement

1. The Information Disclosure Statement submitted on 8/14/06 has been considered by the examiner (see attached PTO-1449 form).

Claim Objections

2. Claim 4 is objected to because of the following informalities:

Claim 4 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 4 does not further limit the limitations of the independent claim 1. Since claim 1 cites "*a separate power supply*" and claim 4 cites "*a separate power supply provides power to the wave detection means **by receiving a wave in a predetermined wireless LAN band***". The bolded limitation of claim 4 means the power source is **derived from a signal** which is different from having a separate power supply as in claim 1.

3. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 10-14 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

4. The bolded phrase “**the identity** is recognized” lacks antecedent basis because no identity was mentioned previously. It’s not clear where the identity comes from.

5. Furthermore, the bolded phrase “**the separate power supply**” lacks antecedent basis because no *separate power supply* was previously mentioned in claim 10.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims **1-3 and 7-9** are rejected under 35 U.S.C. 103(a) as being unpatentable over **iPAQ** (iPAQ Newtorking 11Mbps Wireless PC Cards, 2001) in view of **Novoa** (US Patent No. 6493824).

8. Regarding **claim 1**, **iPAQ** teaches a wireless LAN utilizability detecting system (page 4 and 5) comprising a housing detachably removably (the network card is removable from the PC laptop therefore it is interpreted as detachably removably) mounted on a data terminal device (wireless PC card, page 11), said data terminal device having an inherent main power supply; a wave intensity detecting means disposed at least partly inside the housing and configured to obtain a detection output

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corresponding to wave in a predetermined wireless LAN band (scanning means and rescan, page 13); a detection output means (LED indicator 1, pages 5, 12-13) disposed in the housing and configured to generate an output representing a content as to whether the wireless LAN is utilizable based on the output of the wave intensity detecting means (signal strength, pages 12-13, 5); However, iPAQ does not specifically teach a separate power supply configured to provide power for said wave detecting means even when the main power supply of the data terminal device is off. In an analogous art, **Novoa** teaches a data terminal/computer being placed in a power down state while its network interface card's power is on in order to detect wake up signals from the network. And when the network interface card detects a wake up signal, the wake up signal is compared with an address value and the computer is then wakened up (Abstract, C3 L2-30, C7 L11- 56, Col. 9 Ln 1 – 30). Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to combine **iPAQ's** teaching of a WLAN detection and **Novoa's** teaching of a power management scheme of letting the main power supply of the data terminal to be off while the power supply source of the network card to be on in order to minimize power consumption and thus provide an energy-efficient communication system.

9. Regarding **claim 2**, **iPAQ** and **Novoa** teach the wireless LAN utilizability detecting system according to claim 1, wherein the housing constitutes an inherent adapter for mounting a wireless LAN card on the pertinent data terminal device (iPAQ, page 5 and 11).

10. Regarding **claim 3**, **iPAQ** and **Novoa** teach the wireless LAN utilizability detecting system according to claim 1, wherein the housing constitutes a housing of a wireless LAN card (iPAQ, pages 5 and 11).

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11. Regarding **claim 5**, **iPAQ and Novoa** teach the wireless LAN utilizability detecting system according to claim 1, wherein the wave intensity detecting means includes a comparing means for comparing the intensity of detected wave in the predetermined wireless LAN band and generating an output corresponding to the comparison result as output of the wave intensity detecting means (iPAQ, page 5).

12. Regarding **claim 7**, **iPAQ and Novoa** teach the wireless LAN utilizability detecting system, according to claim 1, wherein the detection output means is arranged to drive a display means provided on the housing according to the output of the wave intensity detecting means (iPAQ, scanning for signal/link quality and displays via graphs or LED, pages 5, 11, 13).

13. Regarding **claim 8**, **iPAQ and Novoa** teach the wireless LAN utilizability detecting system according to claim 7, wherein an LED is used as the display means (iPAQ, page 5).

14. Regarding **claim 9**, **iPAQ and Novoa** teach the wireless LAN utilizability detecting system according to claim 2, in which the housing inherently includes a wireless LAN card side connector, a data terminal device side connector and an inter-connector bus inter-connecting the two connectors, and which further comprises an active checking means for checking whether the inter-connector bus is active and, when the inter-connector is found to be active, rendering the wave intensity detecting means or the detection output means inoperative.

15. Claim **4 and 6** are rejected under 35 U.S.C. 103(a) as being unpatentable over **iPAQ** (iPAQ Newtorking 11Mbps Wireless PC Cards, 2001) in view of **Novoa** (US Patent No. 6493824) further in view of **Hall**. (US Pub No. 2004/0203352).

16. Regarding **claim 4**, **iPAQ and Novoa** teach the wireless LAN utilizability detecting system according to claim 1 except wherein a separate power supply provides power to the wave intensity detecting means by receiving a wave in a predetermined wireless LAN band. In an analogous art, **Hall** teaches the concept of passive RFID, which derives the power from the detected signal, which overcomes the power consumption burden (para. 23, 40, and Abstract). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to combine iPAQ's teaching of the network interface and Hall's teaching of the passive RFID to derived energy from detected signal to minimize the power consumption of the main power unit.

17. With further regard to **claim 6**, **iPAQ, Novoa and Hall** teaches the wireless LAN utilizability detecting means according to claim 1, wherein the detection output means is arranged to output a signal for starting the data terminal device based on the output of the wave intensity detection means (para. 23, 40, and Abstract).

Response to Arguments

Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

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Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung Lam whose telephone number is (571) 272-6497. The examiner can normally be reached on M - F 9 - 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**JEAN GELIN
PRIMARY EXAMINER**

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